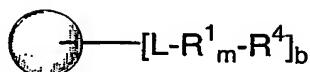


WHAT IS CLAIMED IS:

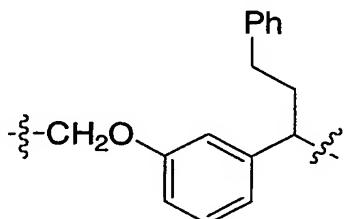
1. A process for the preparation of a compound of the formula I:



I

5 wherein

is an insoluble solid support selected from the group consisting of: poly(styrene-divinylbenzene), macroreticular poly(styrene-divinylbenzene), polystyrene which is radiation grafted to polypropylene, polystyrene which is radiation grafted to polyethylene, polystyrene which is radiation grafted to 10 poly(tetrafluoroethylene), and polystyrene which is radiation grafted to poly(ethylene-tetrafluoroethylene) wherein the insoluble solid support is in a shape selected from a bead, a tube, a rod, a ring, a disk, or a well; L is -CH₂-, -C(CH₃)₂-, -CH(CH₃)-, -(CH₂)_nCH(CN)-, -(CH₂)_nCH(CO₂Me)-, -(CH₂)_nCH(Ph)-, -(CH₂)_nC(CH₃, Ph)-, -CH(CH₂CH₂Ph)-, or



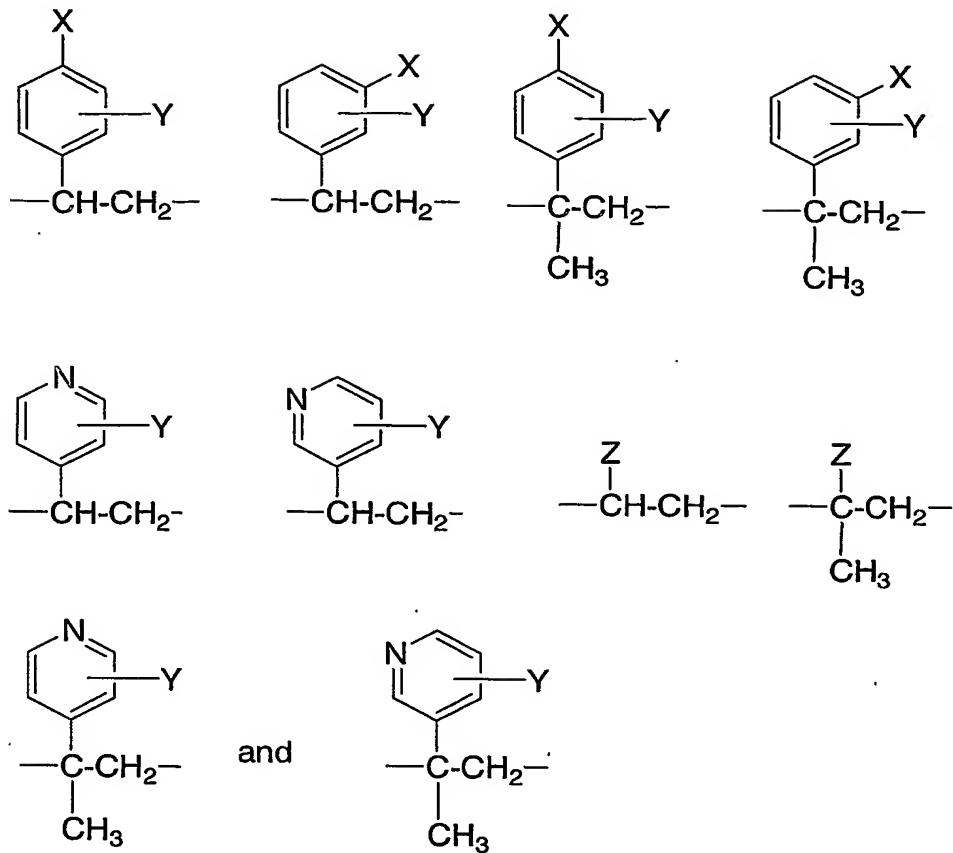
15

n is zero or an integer from 1 to 5;

m is zero or an integer from 1 to 100;

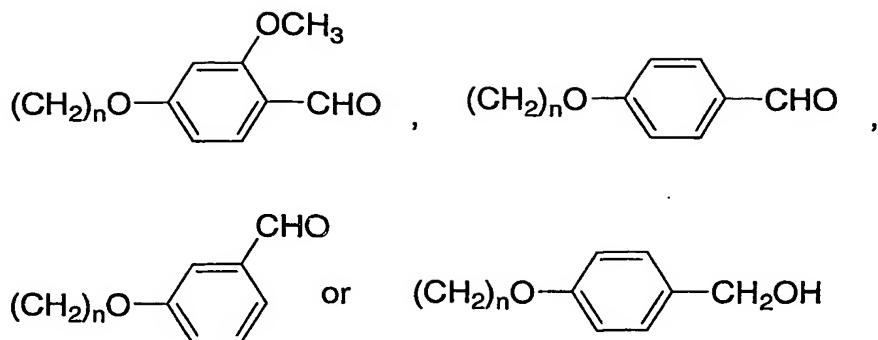
b is mMol content of initiator or solid-supported polymer per gram of insoluble solid support and is about 0.1 to about 5.0 mMol per gram;

20 R¹ is selected from:



wherein

X is H, F, $(CH_2)_nCl$, $(CH_2)_nBr$, $(CH_2)_nI$, $B(OH)_2$, $(CH_2)_nCH=CH_2$, NCO, CH_2NCO , $CH(CH_3)NCO$, $C(CH_3)_2NCO$, CO_2Me , CO_2Et , $CO_2(t-Bu)$, CO_2H , $COCl$, $CO_2CH(CF_3)_2$, CO_2Ph , CO_2 (pentafluorophenyl), CO_2 (peritachlorophenyl), CO_2 (N-succinimidyl), $C(OMe)_3$, $C(OEt)_3$, $(CH_2)_nOH$, $(CH_2)_nCH(OH)CH_2OH$, $(CH_2)_nSH$, $CH_2NHCH_2CH_2SH$, $(CH_2)_nNHC(=S)NH_2$, $(CH_2)_nNH_2$, $(CH_2)_nN(Me)_2$, $(CH_2)_nN(Et)_2$, $(CH_2)_n(iPr)_2$, $CH(CH_3)NH_2$, $C(CH_3)_2NH_2$, $CH_2NHCH_2CH_2NH_2$, $CH_2NHCH_2CH_2NHCH_2CH_2NH_2$,
 5 $CH_2N(CH_2CH_2NH_2)_2$, $CH_2NHCH_2CH_2N(CH_2CH_2NH_2)_2$,
 $CH_2N(CH_2CH_2OH)_2$, $(CH_2)_n$ (morpholin-4-yl), $(CH_2)_n$ (piperidin-1-yl),
 $(CH_2)_n$ (4-methylpiperazin-1-yl), $N(SO_2CF_3)_2$, $(CH_2)_nCHO$, $(CH_2)_nSi(Me)_2H$,
 $(CH_2)_nSi(Et)_2H$, $(CH_2)_nSi(iPr)_2H$, $(CH_2)_nSi(tBu)_2H$, $(CH_2)_nSi(Ph)_2H$,
 $(CH_2)_nSi(Ph)(tBu)H$, $(CH_2)_nSi(Me)_2Cl$, $(CH_2)_nSi(Et)_2Cl$, $(CH_2)_nSi(i-Pr)_2Cl$,
 $(CH_2)_nSi(tBu)_2Cl$, $(CH_2)_nSi(Ph)_2Cl$, $(CH_2)_nSi(tBu)(Ph)Cl$, $P(Ph)_2$, $P(o-tolyl)_2$,
 10
 15

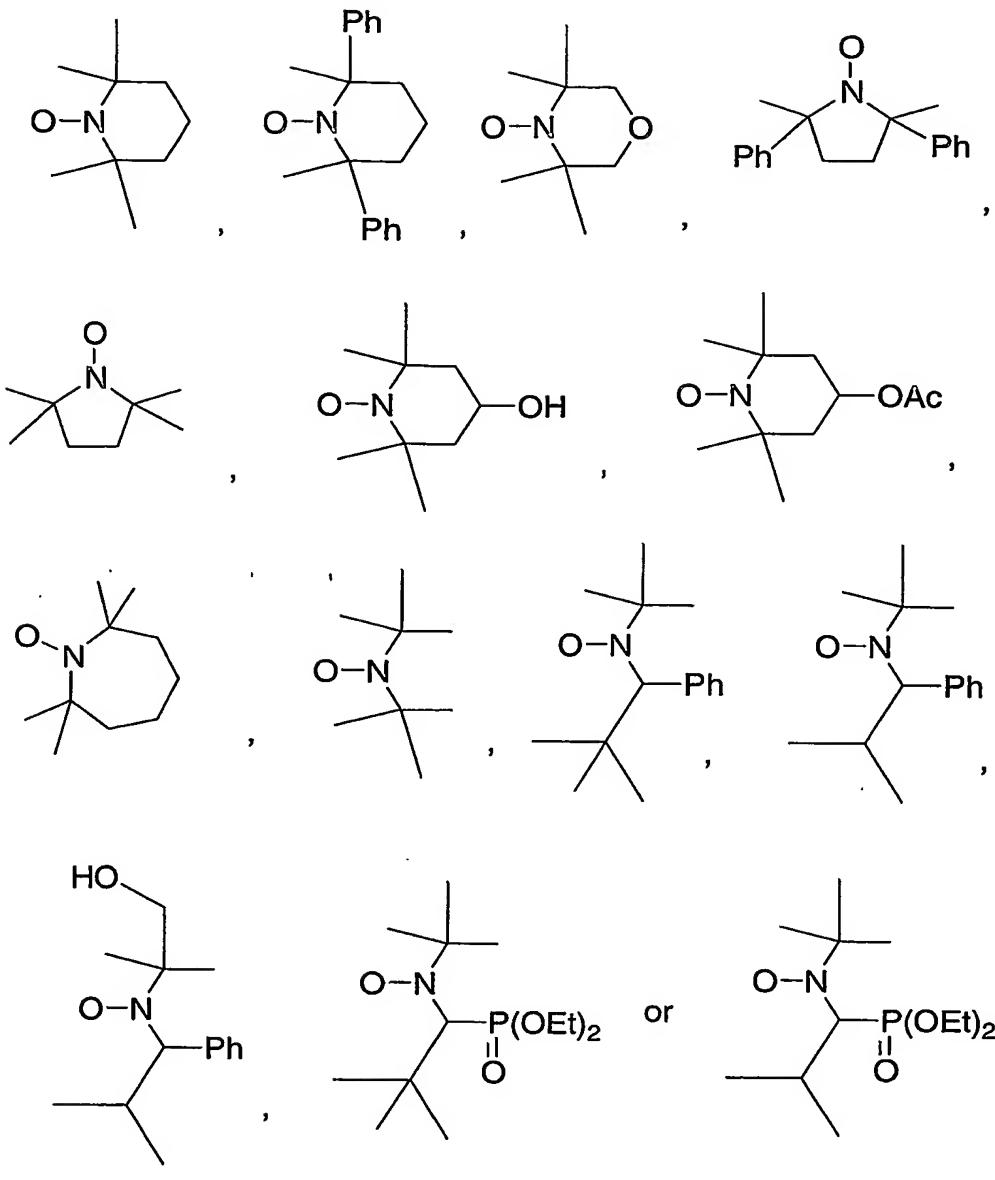


wherein n is zero or an integer from 1 to 5 ;

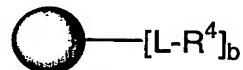
Y is H, Cl, Br, F, OH, or OMe;

Z is NCO, CO₂Me, CO₂Et, CO₂(i-Pr), CO₂(n-Bu), CO₂(t-Bu), CN, CO₂H, COCl,
 5 CO₂CH(CF₃)₂, CO₂ (pentafluorophenyl), CO₂(pentachlorophenyl), CO₂Ph,
 CO₂(N—succinimidyl), C(OMe)₃, C(OEt)₂, CON(OCH₃)CH₃, CHO, CH₂OH,
 or C(CH₃)₂OH; and

R⁴ is

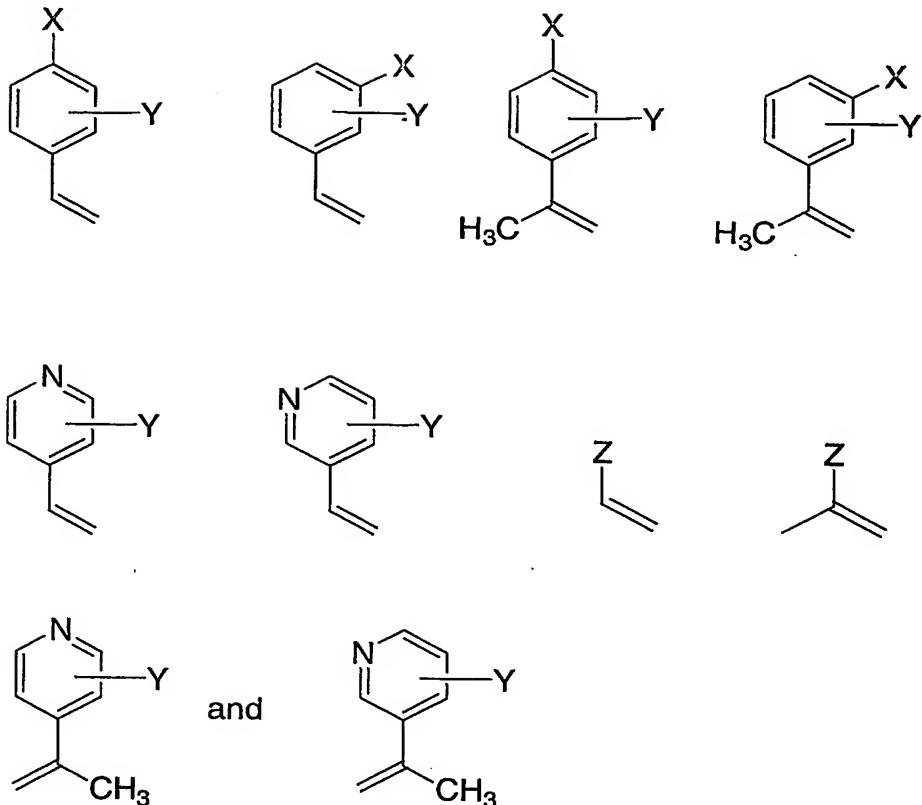


which comprises the step of microwave irradiating a mixture comprising a compound of the formula II

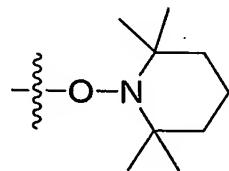


II

5 and a compound III selected from:

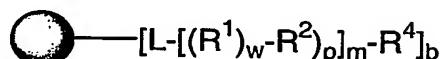


2. The process according to Claim 1 wherein R^4 is



5

3. A process for the preparation of a compound of the formula IV:



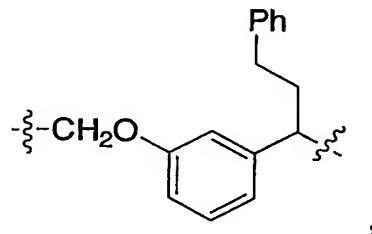
IV

wherein



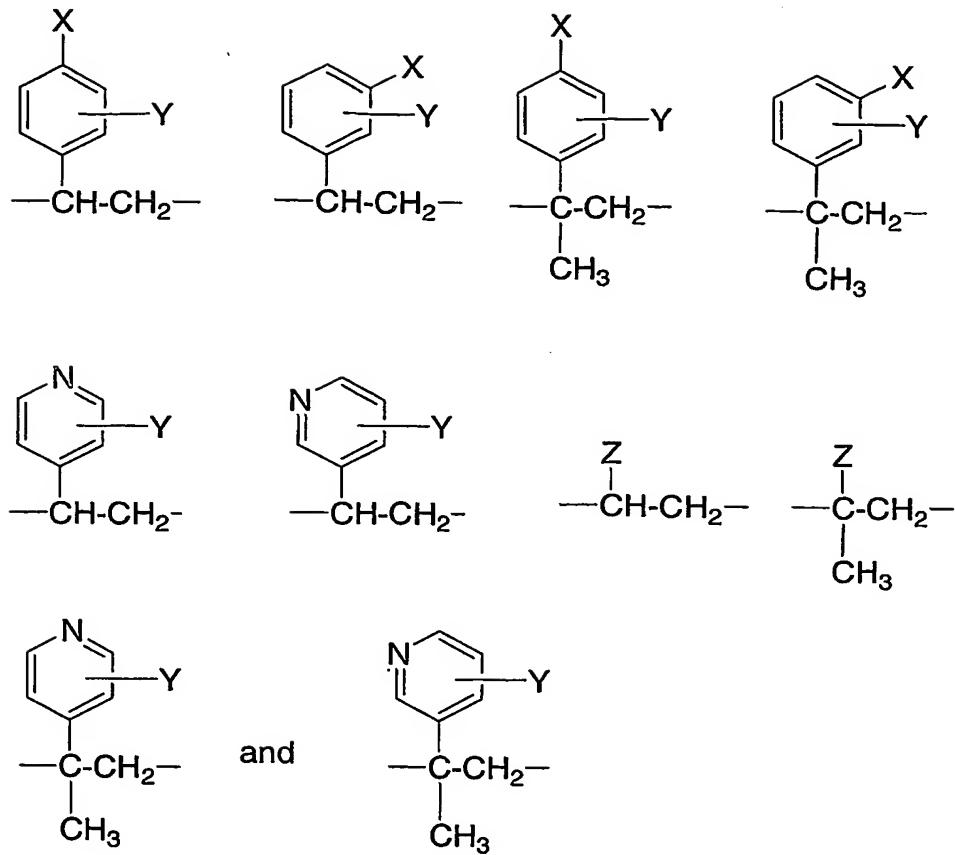
is an insoluble solid support selected from the group consisting of:

poly(styrene-divinylbenzene), macroreticular poly(styrene-divinylbenzene), polystyrene which is radiation grafted to polypropylene, polystyrene which is radiation grafted to polyethylene, polystyrene which is radiation grafted to poly(tetrafluoroethylene), and polystyrene which is radiation grafted to poly(ethylene-tetrafluoroethylene) wherein the insoluble solid support is in a shape selected from a bead, a tube, a rod, a ring, a disk, or a well; L is -CH₂-, -C(CH₃)₂-, -CH(CH₃)-, -(CH₂)_nCH(CN)-, -(CH₂)_nCH(CO₂Me)-, -(CH₂)_nCH(Ph)-, -(CH₂)_nC(CH₃, Ph)-, -CH(CH₂CH₂Ph)-, or



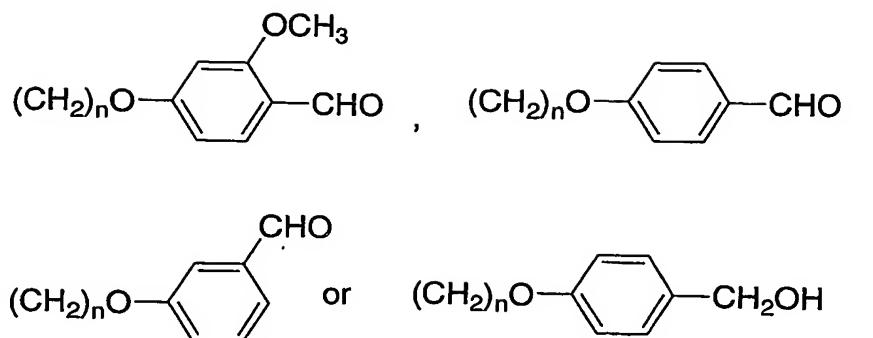
10 n is zero or an integer from 1 to 5;
 m is zero or an integer from 1 to 100;
 w is an integer from 1 to 10;
 p is zero or an integer from 1 to 10;
 b is mMol content of initiator or solid-supported polymer per gram of insoluble solid

15 support and is about 0.1 to about 5.0 mMol per gram;
 R¹ and R² are each independently the same or different and are selected from



wherein

X is H, F, $(CH_2)_nCl$, $(CH_2)_nBr$, $(CH_2)_nI$, $B(OH)_2$, $(CH_2)_nCH=CH_2$, NCO , CH_2NCO ,
 $CH(CH_3)NCO$, $C(CH_3)_2NCO$, CO_2Me , CO_2Et , $CO_2(t-Bu)$, CO_2H , $COCl$,
 $CO_2CH(CF_3)_2$, CO_2Ph , CO_2 (pentafluorophenyl), CO_2 (pentachlorophenyl),
 CO_2 (N-succinimidyl), $C(OMe)_3$, $C(OEt)_3$, $(CH_2)_nOH$, $(CH_2)_nCH(OH)CH_2OH$,
 $(CH_2)_nSH$, $CH_2NHCH_2CH_2SH$, $(CH_2)_nNHC(=S)NH_2$, $(CH_2)_nNH_2$,
 $(CH_2)_nN(Me)_2$, $(CH_2)_nN(Et)_2$, $(CH_2)_n(iPr)_2$, $CH(CH_3)NH_2$, $C(CH_3)_2NH_2$,
 $CH_2NHCH_2CH_2NH_2$, $CH_2NHCH_2CH_2NHCH_2CH_2NH_2$,
 $CH_2N(CH_2CH_2NH_2)_2$, $CH_2NHCH_2CH_2N(CH_2CH_2NH_2)_2$, $CH_2N(CH_2CH_2OH)_2$,
 $(CH_2)_n$ (morpholin-4-yl), $(CH_2)_n$ (piperidin-1-yl), $(CH_2)_n$ (4-methylpiperazin-1-yl), $N(SO_2CF_3)_2$, $(CH_2)_nCHO$, $(CH_2)_nSi(Me)_2H$, $(CH_2)_nSi(Et)_2H$, $(CH_2)_nSi(iPr)_2H$, $(CH_2)_nSi(tBu)_2H$, $(CH_2)_nSi(Ph)_2H$, $(CH_2)_nSi(Ph)(tBu)H$, $(CH_2)_nSi(Me)_2Cl$, $(CH_2)_nSi(Et)_2Cl$, $(CH_2)_nSi(i-Pr)_2Cl$, $(CH_2)_nSi(tBu)_2Cl$, $(CH_2)_nSi(Ph)_2Cl$, $(CH_2)_nSi(tBu)(Ph)Cl$, $P(Ph)_2$, $P(o-tolyl)_2$,

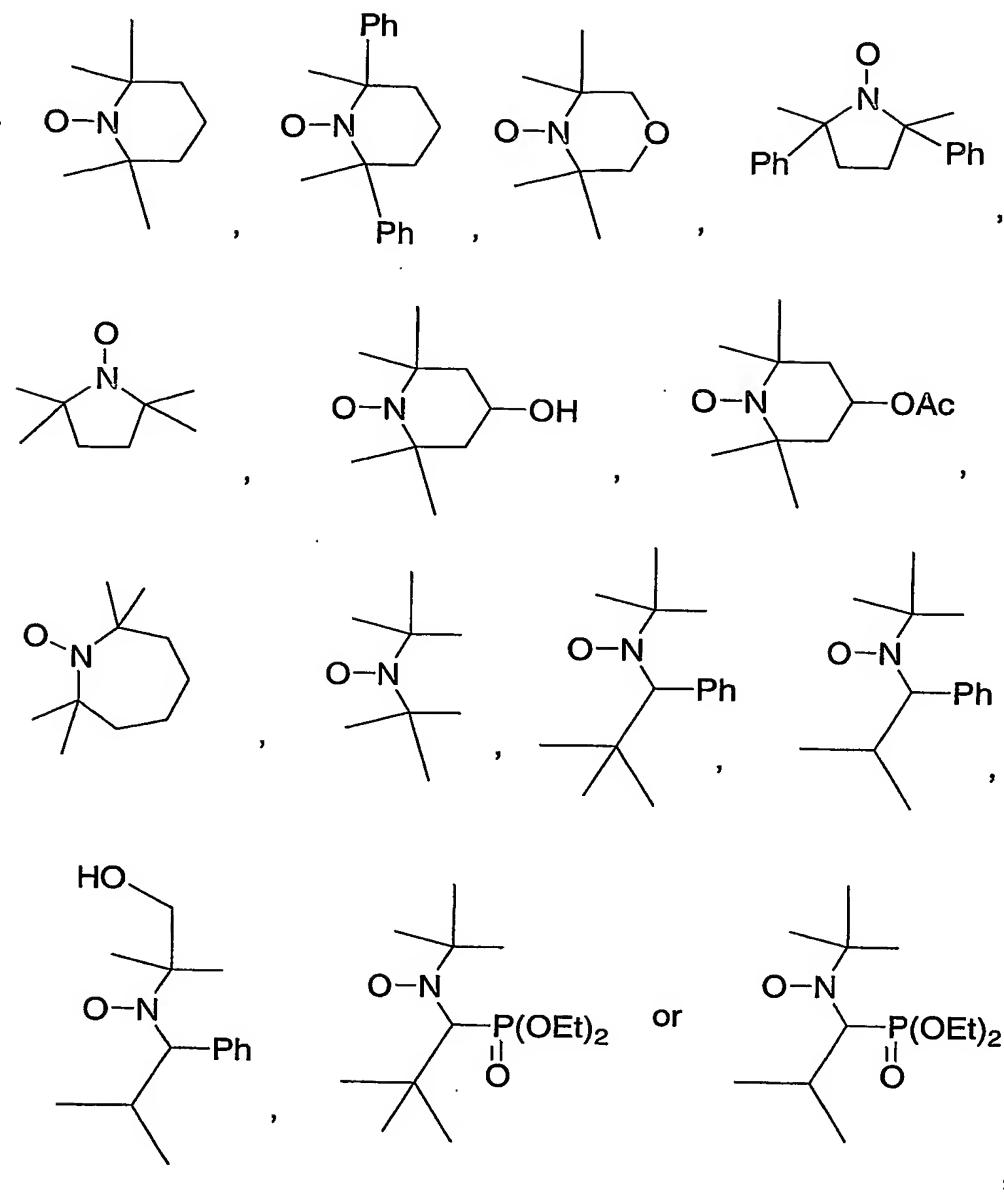


wherein n is zero or an integer from 1 to 5;

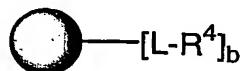
Y is H, Cl, Br, F, OH, or OMe;

Z is NCO, CO₂Me, CO₂Et, CO₂ (i-Pr), CO₂(n-Bu), CO₂(t-Bu), CN, CO₂H, COCl,
5 CO₂CH(CF₃)₂, CO₂(pentafluorophenyl), CO₂(pentachlorophenyl), CO₂Ph,
CO₂(N-succinimidyl), C(OMe)₃, C(OEt)₂, CON(OCH₃)CH₃, CHO, CH₂OH,
or C(CH₃)₂OH; and

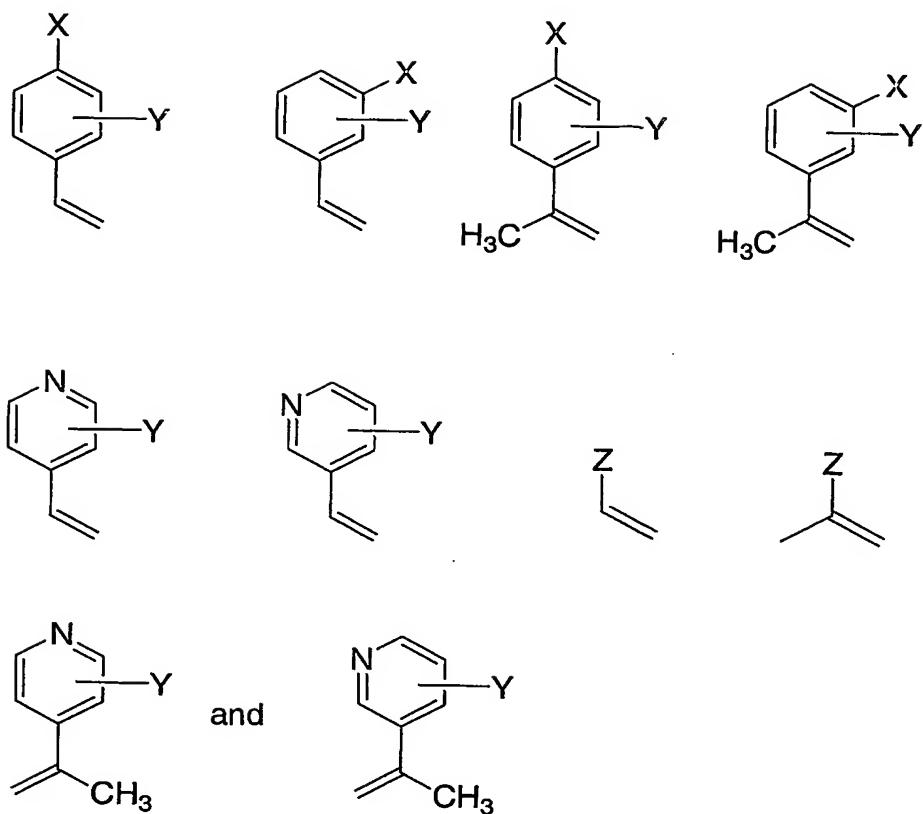
R⁴ is



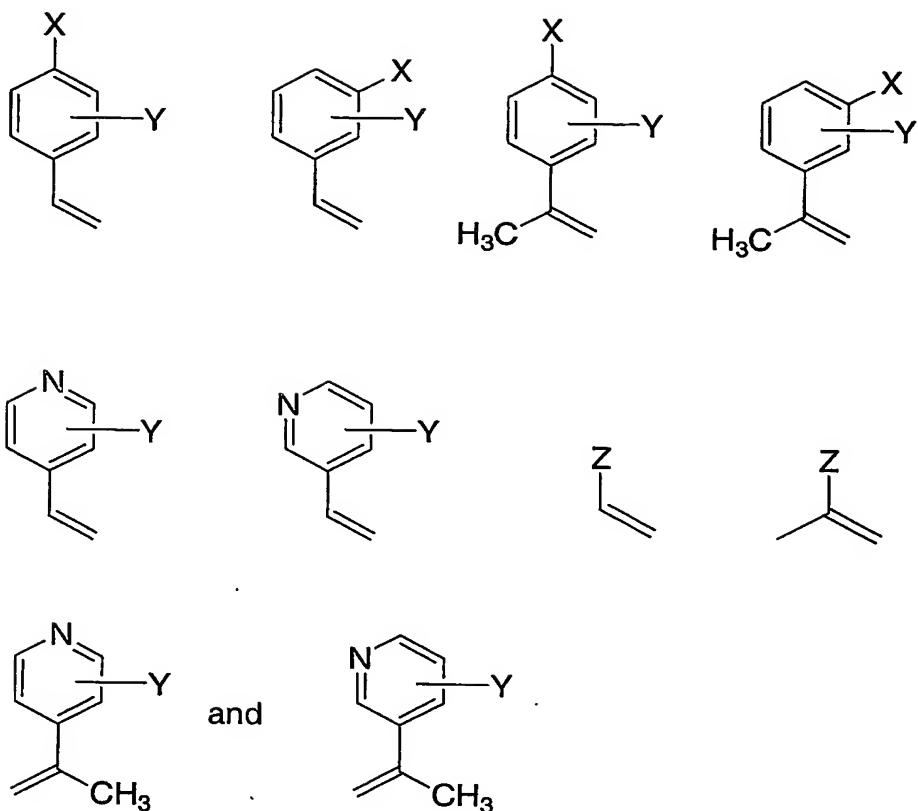
which comprises the step of microwave irradiating a mixture comprising a compound of the formula II



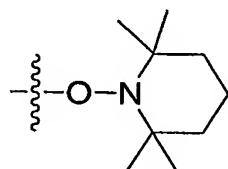
5 a compound III selected from:



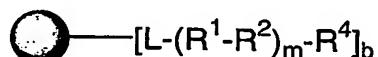
and a compound V selected from:



4. The process according to Claim 3 wherein R⁴ is



5. A process for the preparation of a compound of the formula
5 VI:



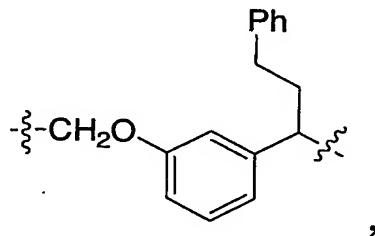
VI

wherein

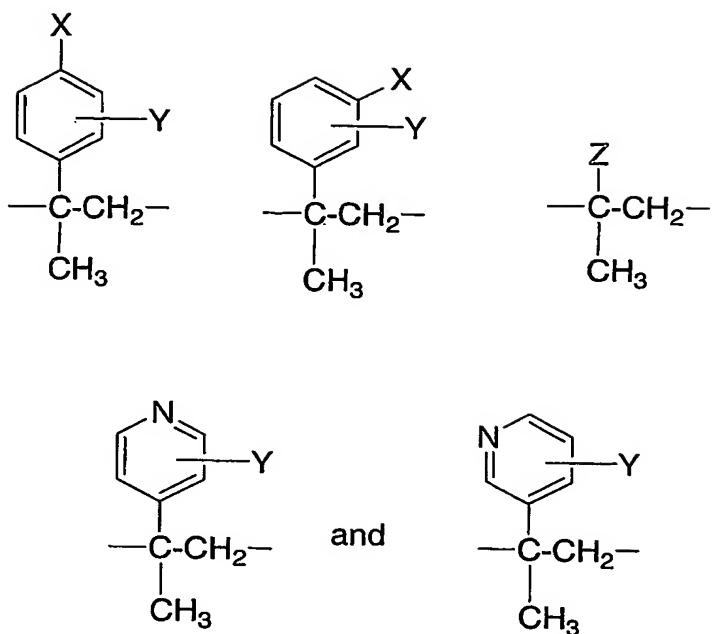


is an insoluble solid support selected from the group consisting of:

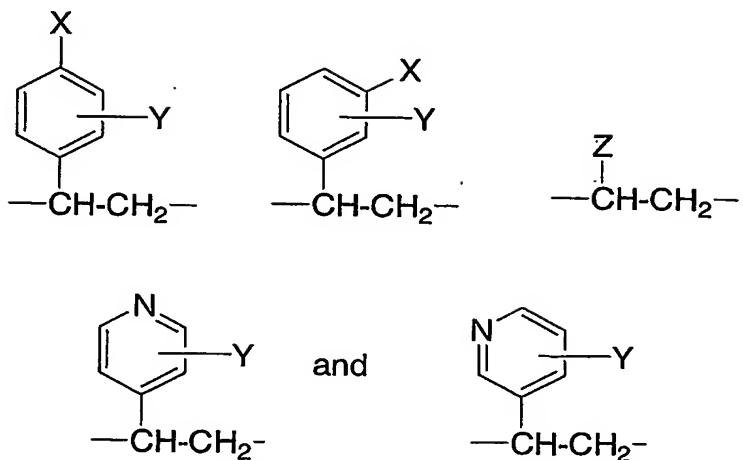
poly(styrene-divinylbenzene), macroreticular poly(styrene-divinylbenzene), polystyrene which is radiation grafted to polypropylene, polystyrene which is radiation grafted to polyethylene, polystyrene which is radiation grafted to poly(tetrafluoroethylene), and polystyrene which is radiation grafted to poly(ethylene-tetrafluoroethylene) wherein the insoluble solid support is in a shape selected from a bead, a tube, a rod, a ring, a disk, or a well; L is $-\text{CH}_2-$, $-\text{C}(\text{CH}_3)_2-$, $-\text{CH}(\text{CH}_3)-$, $-(\text{CH}_2)_n\text{CH}(\text{CN})-$, $-(\text{CH}_2)_n\text{CH}(\text{C}_2\text{Me})-$, $-(\text{CH}_2)_n\text{CH}(\text{Ph})-$, $-(\text{CH}_2)_n\text{C}(\text{CH}_3,\text{Ph})-$, $-\text{CH}(\text{CH}_2\text{CH}_2\text{Ph})-$, or



10 n is zero or an integer from 1 to 5;
 m is zero or an integer from 1 to 100;
 w is an integer from 1 to 10;
 p is zero or an integer from 1 to 10;
 b is mMol content of initiator or solid-supported polymer per gram of insoluble solid
 15 support and is about 0.1 to about 5.0 mMol per gram;
 R¹ is selected from



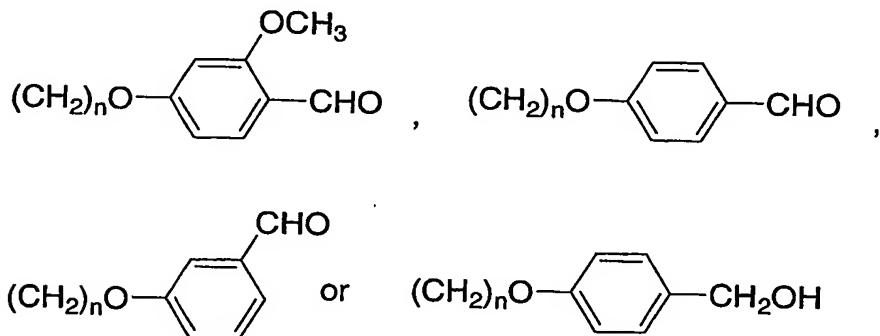
R^2 is selected from



wherein

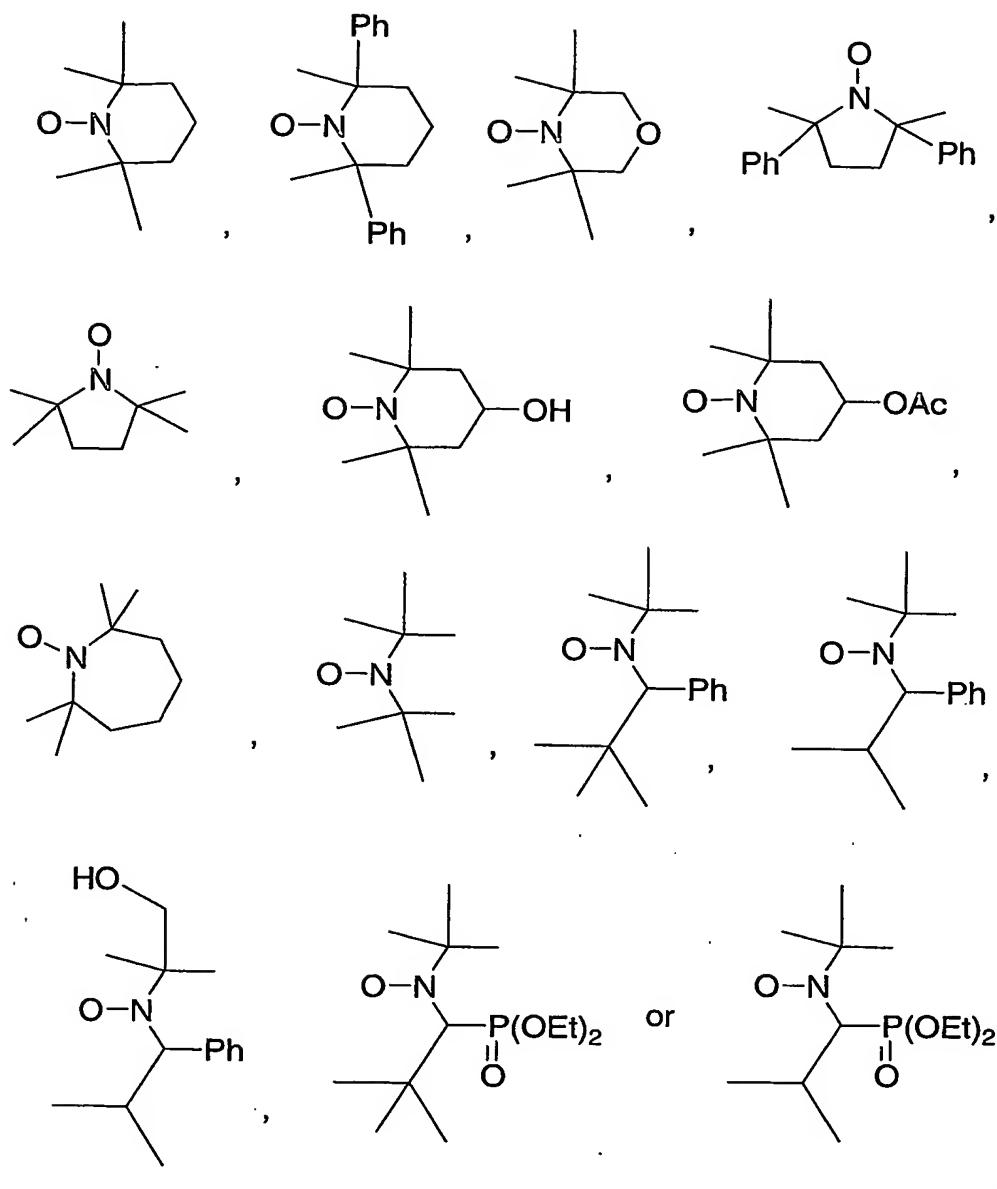
5 X is H, F, $(CH_2)_nCl$, $(CH_2)_nBr$, $(CH_2)_nI$, $B(OH)_2$, $(CH_2)_nCH=CH_2$, NCO, CH_2NCO , $CH(CH_3)NCO$, $C(CH_3)_2NCO$, CO_2Me , CO_2Et , $CO_2(t-Bu)$, CO_2H , COC_1 , $CO_2CH(CF_3)_2$, CO_2Ph , CO_2 (pentafluorophenyl), CO_2 (pentachlorophenyl), CO_2 (N-succinimidyl), $C(OMe)_3$, $C(OEt)_3$, $(CH_2)_nOH$, $(CH_2)_nCH(OH)CH_2OH$, $(CH_2)_nSH$, $CH_2NHCH_2CH_2SH$, $(CH_2)_nNHC(=S)NH_2$, $(CH_2)_nNH_2$,
 10 $(CH_2)_nN(Me)_2$, $(CH_2)_nN(Et)_2$, $(CH_2)_n(iPr)_2$, $CH(CH_3)NH_2$, $C(CH_3)_2NH_2$,

5 $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2$, $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2$,
 $\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{NH}_2)_2$, $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{NH}_2)_2$, $\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{OH})_2$,
 $(\text{CH}_2)_n(\text{morpholin-4-yl})$, $(\text{CH}_2)_n(\text{piperidin-1-yl})$, $(\text{CH}_2)_n(\text{4-methylpiperazin-1-yl})$,
 $\text{N}(\text{SO}_2\text{CF}_3)_2$, $(\text{CH}_2)_n\text{CHO}$, $(\text{CH}_2)_n\text{Si}(\text{Me})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{Et})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{iPr})_2\text{H}$,
 $(\text{CH}_2)_n\text{Si}(\text{tBu})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{Ph})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{Ph})(\text{tBu})\text{H}$,
 $(\text{CH}_2)_n\text{Si}(\text{Me})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{Et})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{i-Pr})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{tBu})_2\text{Cl}$,
 $(\text{CH}_2)_n\text{Si}(\text{Ph})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{tBu})(\text{Ph})\text{Cl}$, $\text{P}(\text{Ph})_2$, $\text{P}(\text{o-tolyl})_2$,

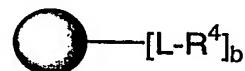


wherein n is zero or an integer from 1 to 5;

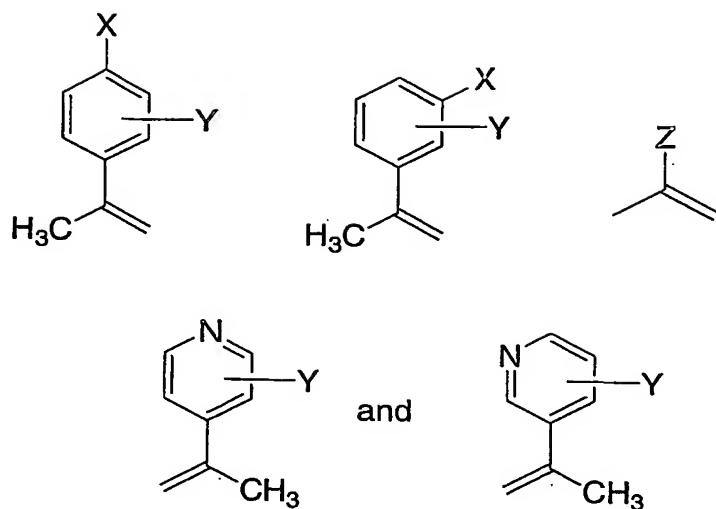
10 Y is H, Cl, F, OH, or OMe;
 Z is NCO, CO₂Me, CO₂Et, CO₂ (i-Pr), CO₂(n-Bu), CO₂(t-Bu), CN, CO₂H, COCl, CO₂CH(CF₃)₂, CO₂(pentafluorophenyl), CO₂(pentachlorophenyl), CO₂Ph, CO₂(N-succinimidyl), C(OMe)₃, C(OEt)₂, CON(OCH₃)CH₃, CHO, CH₂OH, or C(CH₃)₂OH; and
 15 R⁴ is



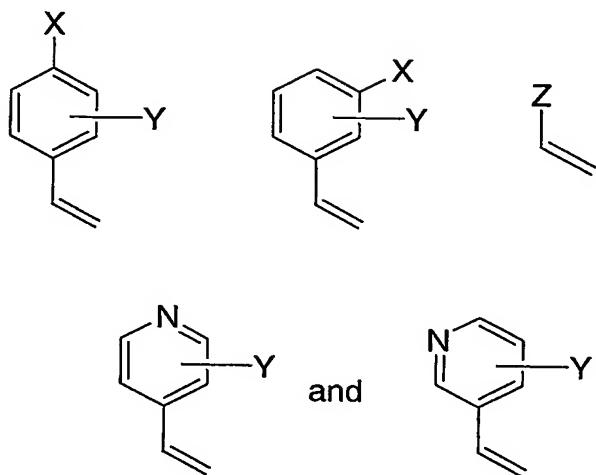
which comprises the step of microwave irradiating a mixture comprising a compound of the formula II



5 a compound VII selected from:

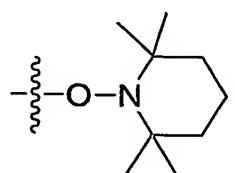


and a compound VIII selected from:

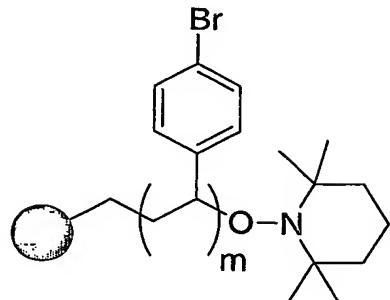


5 wherein the ratio of the compound VII and the compound VIII is about 2:1.

6. The process according to Claim 5 wherein R^4 is

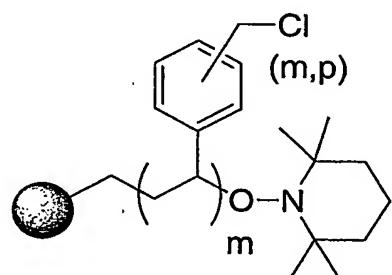


7. A compound which is



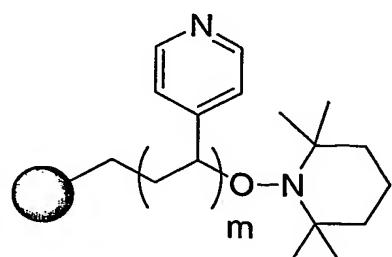
5 wherein is a polystyrene resin, m is from 1 to 100 and the bromine content is
from about 4 to about 6 mmol/gram of resin.

8. A compound which is



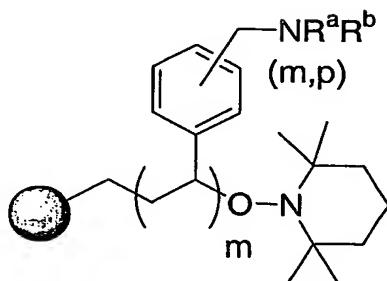
10 wherein is a polystyrene resin, m is from 1 to 100 and the chlorine content is
from about 5 to about 7 mmol/gram of resin.

9. A compound which is



wherein  is a polystyrene resin, m is from 1 to 100 and the pyridyl content is from about 5 to about 7 mmol/gram of resin.

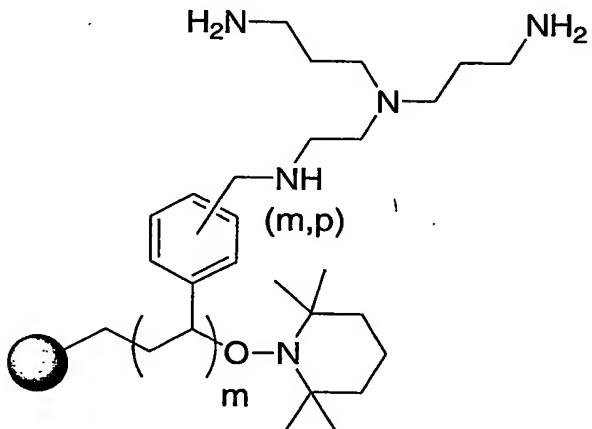
10. A compound which is



5

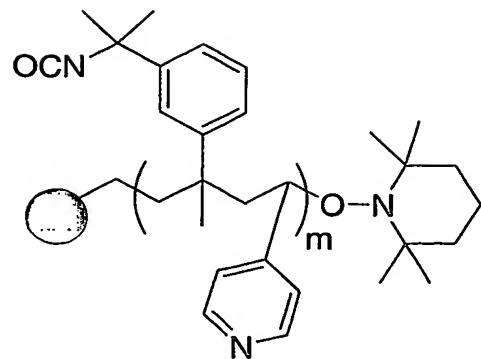
wherein  is a polystyrene resin, m is from 1 to 100, $-\text{NR}^a\text{R}^b$ is selected from diethylamino, diisopropylamino, piperidinyl, morpholino and piperazinyl and the amine content is from about 4 to about 7 mmol/gram of resin.

10 11. A compound which is



wherein  is a polystyrene resin, m is from 1 to 100, and the amine content is from about 3 to about 6 mmol/gram of resin.

15 12. A compound which is



wherein  is a polystyrene resin, m is from 1 to 100, and the isocyanate content is from about 1 to about 4 mmol/gram of resin.